

What is claimed is:

1. A frequency characteristic adjustment apparatus in which an inputted signal is subjected to adjustment for making a frequency characteristic of the signal agree with a target frequency characteristic, the apparatus comprising:

an estimation device configured to divide the inputted signal into a signal component falling into a one fixed-level band and one or more signal components falling into one or more variable-level bands and to estimate a relative level of the signal component in each variable-level band on the basis of a level of the signal component in the fixed-level band in the target frequency characteristic;

an adjustment device configured to adjust the level of the signal component of each variable-level band of the signal based on the estimated relative level of the signal component in each variable-level band; and

an output device configured to output the signal adjusted by the adjustment device.

2. The frequency characteristic adjustment apparatus according to claim 1, wherein the inputted signal is composed of an audio signal, and

the estimation device is configured to assign, to the fixed-level band, a predetermined frequency band in which changes in sound pressure are sensitive to human audibility and to divide the inputted signal.

3. A frequency characteristic adjustment apparatus, comprising:  
an adjustment device configured to divide an audio signal inputted from outside the apparatus into a signal component falling into one fixed-level band and one or more signal components falling into one or more variable-level bands and to adjust levels of the signal components in only the variable-level bands of the audio signal; and

an output device configured to output the audio signal adjusted by the adjustment device,

wherein the adjustment device is configured to assign, to the fixed-level band, a predetermined frequency band in which changes in

sound pressure are sensitive to human audibility and to divide the inputted audio signal.

4. The frequency characteristic adjustment apparatus according  
5 to claim 2, wherein the predetermined frequency band assigned to the  
fixed-level band by the adjustment device includes a frequency of 1 kHz  
in the inputted signal.

5. The frequency characteristic adjustment apparatus according  
10 to claim 2, wherein the predetermined frequency band assigned to the  
fixed-level band by the adjustment device includes a predetermined  
frequency range from 500 Hz to 2 kHz in the inputted signal.

6. The frequency characteristic adjustment apparatus according  
15 to claim 2, wherein the predetermined frequency band assigned to the  
fixed-level band by the adjustment device includes a predetermined  
frequency range included in a range of 500 Hz to 2 kHz in the inputted  
signal.

7. The frequency characteristic adjustment apparatus according  
20 to claim 2, further comprising a level adjustment device configured to  
adjust a level of the signal outputted from the output device so that the  
inputted signal and the signal outputted from the output device are made  
to be equal in signal levels to each other.

8. The frequency characteristic adjustment apparatus according  
25 to claim 2, further comprising a measuring-signal generation device  
configured to provide, to a reception device configured to receive the  
inputted signal, a measuring signal having a predetermined frequency  
30 band in which changes in sound pressure are sensitive to human  
audibility.

9. A program, carried out by a computer, for adjusting a  
frequency characteristic of an inputted signal so that the frequency  
35 characteristic of the signal agrees with a target frequency characteristic,  
the program making the computer have the functions of:

receiving the inputted signal;

dividing the inputted signal into a signal component falling into a one fixed-level band and one or more signal components falling into one or more variable-level bands;

5       estimating a relative level of the signal component in each variable-level band on the basis of a level of the signal component in the fixed-level band in the target frequency characteristic;

adjusting the level of the signal component of each variable-level band of the signal based on the estimated relative level of the signal component in each variable-level band; and

10       outputting the adjusted signal.

10. A program, carried out by a computer, for adjusting a frequency characteristic of an inputted audio signal so that the frequency characteristic of the signal agrees with a target frequency characteristic, the program making the computer have the functions of:

receiving the inputted audio signal;

dividing the received audio signal into a signal component falling into one fixed-level band and one or more signal components falling into one or more variable-level bands, a predetermined frequency band in which changes in sound pressure are sensitive to human audibility being assigned to the fixed-level band;

20       adjusting levels of the signal components in only the variable-level bands of the audio signal; and

25       outputting the adjusted audio signal.

11. A method of adjusting a frequency characteristic of an inputted signal so that the frequency characteristic of the signal agrees with a target frequency characteristic, the method comprising the steps of:

30       receiving the inputted signal;

dividing the received signal into a signal component falling into a one fixed-level band and one or more signal components falling into one or more variable-level bands;

35       estimating a relative level of the signal component in each variable-level band on the basis of a level of the signal component in the

fixed-level band in the target frequency characteristic;

adjusting the level of the signal component of each variable-level band of the signal based on the estimated relative level of the signal component in each variable-level band; and

5        outputting the signal adjusted by the adjustment step.

12. A method of adjusting a frequency characteristic of an inputted audio signal so that the frequency characteristic of the audio signal agrees with a target frequency characteristic, the method  
10   comprising the steps of:

receiving the inputted audio signal;

dividing the received audio signal into a signal component falling into one fixed-level band and one or more signal components falling into one or more variable-level bands, a predetermined frequency band in  
15   which changes in sound pressure are sensitive to human audibility being assigned to the fixed-level band;

adjusting levels of the signal components in only the variable-level bands of the audio signal; and

outputting the audio signal adjusted by the adjustment step.